

New Records of Lepidoptera for New York and New Hampshire (*Nymphalidae*, *Noctuidae*)

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Abstract. Recent collecting in the Northeast has added the following Lepidoptera species to our regional lists: *Aglais urticae* (Linnaeus) [*Nymphalidae*], *Syngrapha abstrusa* Eichlin & Cunningham, *Syngrapha montana* Packard, *Syngrapha microgamma* (Hübner), *Autographa rubida* Ottolengui, *Papestra quadrata* (Smith), *Anarta cordigera* (Thunberg), *Pachypolia atricornis* Grote, *Gabara subnivosella* Walker, *Xestia atrata* (Morrison), *Anomogyna rhaetica* (Staudinger), *Anomogyna fabulosa* Ferguson, *Apamea commoda* (Walker), *Oligia obtusa* (Smith), *Eutricopis nexilis* Morrison, *Bagisara rectilinea* (Grote), *Sympistis heliophila* (Paykull), *Sympistis funesta* (Paykull), *Macrochilo hypocritalis* Ferguson [all *Noctuidae*]. Dates, localities and life history notes are given and the species are illustrated. *Chamaedaphne calyculata* (L.) Moench [*Ericaceae*] is reported as a host for *Syngrapha microgamma*.

Introduction

Several summers spent rearing Lepidoptera in Albany's Pine Bush and in the Adirondack Mountains of New York, supplemented by several trips to Mount Washington in New Hampshire, has resulted in the discovery of several species that appear to represent new distribution records for the region. Some appear to be new to the continental United States or even North America. Detailed locality information is given in the legend below the plates. These records may not represent the first individuals ever collected at these localities, but are the first published report of which I am aware and represent noteworthy range extensions. Several papers appeared on the White Mountain Lepidoptera in the first issue of the journal *Psyche*. Of particular note is a paper by Morrison (1875) that lists *Noctuidae*. Forbes (1954) gives a recent synopsis of the Lepidoptera fauna for our region and makes many references to the higher elevations. The new records are as follows.

Nymphalidae

Aglais urticae (Linnaeus). [Fig. 1]. A colleague, Charles Sheviak, discovered this butterfly flying on the grounds of the New York State Museum in downtown Albany, directed me to the spot, and I netted it after watching it frequent bare spots of ground where it would bask.

Emmons (1854) reported this as having been collected in the vicinity of Albany in 1853. However, no North American specimens were found in the New York State Museum's collection and Emmons' work was not well received. Emmons was a geologist and criticisms of his work included this comment by Schwarz (1892): "There are several instances on record where useless books have been printed at the public expense, but there has never been a more striking illustration of waste of money." In correspondence, Asa Fitch wrote, "Like his volume on Fruits, this on Insects, I think, must fall still born from the press" (Barnes, 1984). Possibly as a consequence of the lack of authority, catalogors have ignored Emmons report of *Aglaia urticae*. Indeed, Emmons may well have meant to illustrate *Nymphalis milberti* inasmuch as no mention is made of that species' occurrence in New York. Also, specimens of *A. urticae* from Europe were apparently available to Emmons. All this notwithstanding, the present findings lends credence to the 1853 records.

The butterfly's occurrence, by any means, is not natural. Albany is an important port of commerce. The butterfly is univoltine at this latitude and the adult overwinters. It should be looked for very late and very early in the season to determine if it has become established. The example figured is clearly the nominate race and is found throughout western Europe, across Russia and Asia, and east to the Pacific coast of the Palearctic region.

Noctuidae

Syngrapha abstrusa Eichlin & Cunningham. [Fig. 2]. A distribution map is provided in the original description (1978). Its discovery in the Adirondacks was not unexpected.

Syngrapha montana Packard. [Fig. 3]. Described from Mt. Washington, I have taken a specimen at ultraviolet light at Lake Tear well below tree line on Mt. Marcy. In addition, I have taken a specimen at flowers in the daytime on Mt. Washington. It is decidedly rare in the East. Ferguson (1955) cites additional records.

Autographa rubida Ottolengui. [Fig. 4]. This boreal species was taken in the Adirondacks on *Apocynum* blossoms at night. Eichlin and Cunningham (1978) show a distribution dot for the Adirondacks, but I have been unable to locate the specimen.

Syngrapha microgamma (Hübner). [Fig. 5]. Ferguson (1955) has described the North American population as race *nearctica*. I swept two mature larvae (Fig. 20) from *Chamaedaphne calyculata* (L.) Moench [Ericaceae] on a bog near Raquette Lake in the Adirondacks. One was reared to adult and I have several light-trapped specimens from the same bog as well as from Bloomingdale bog in Franklin County, New York.

Papestra quadrata (Smith). [Fig. 6]. McCabe (1980) gives a distribution map of this species. One specimen was taken above tree line on Mt. Washington in New Hampshire at ultraviolet light.

Anarta cordigera (Thunberg). [Fig. 7]. This day-flying, bog-inhabiting species has been recorded from nearby Hawley bog in Massachusetts and is much more general to our north. I have it from three different bogs near the Browns Tract Ponds in the Adirondacks (all Hamilton County).

Pachypolia atricornis Grote. [Fig. 8]. This moth occurs later in the season than when most people collect. I have taken it in late September in the Adirondacks. I recently identified one for John Glaser which he had collected on Warrior Mt., Allegany Co., Maryland, on November 3rd, 1987, so it may prove to be much more widespread in the East than formerly recognized.

Gabara subnivosella Walker. [Fig. 9]. I have taken several specimens in Albany's Pine Bush. They represent a coastal form known as *bipuncta* (Morrison). According to Richards (1942) this form is most common in salt marshes, but also occurs in some inland marshes and he reported in from Long Island. I have it from dry, sandy barrens in Albany's Pine Bush.

Xestia atrata (Morrison). [Fig. 10]. Found just above tree line and in the krummholz on Whiteface Mt. It is known from Mt. Washington in New Hampshire and from numerous Canadian localities. Lafontaine, et al., (1987) give a distribution map. The example illustrated represents the nominate race.

Anomogyna rhaetica (Staudinger). [Fig. 11]. This species is the *sincera* mentioned by Forbes (1954) as being from Glens Falls. The Glens Falls locality seems suspect as this is a krummholz species and I have recorded it from Whiteface Mt. in the Adirondacks. The moth has also been associated with the name *Anomogyna homogena conditoides* Benjamin (see Ferguson, 1965).

Anomogyna fabulosa Ferguson. [Fig. 12]. This recently described species has been recorded from the White Mountains of New Hampshire and in Canada. I took it in the krummholz on Whiteface Mt. and also at Lake Tear on Mt. Marcy.

Apamea commoda (Walker). [Fig. 13]. Walker's type locality is not known for certain and Forbes (1954) suggests Trenton Falls, N.Y. Three specimens were taken in the krummholz on Whiteface Mt.

Oligia obtusa (Smith). [Fig. 14]. This moth may be utilizing roadside *Rumex*. It has been recorded from Albany's Pine Bush. I kept the solitary female specimen alive in the hopes of obtaining eggs (unsuccessfully) as a consequence the specimen figured has become very rubbed.

Eutricopis nexilis Morrison. [Fig. 15]. I took adults, which are diurnal, and (later in the season) larvae (Fig. 22) on the blossoms of *Antennaria canadensis* Greene in the Adirondacks. Hardwick (1970) describes the biology of the species.

Bagisara rectifascia (Grote). [Fig. 16]. This has been collected on Albany's Pine Bush and may be a new arrival. Increased use of ornamental Malvaceae may account for its recent occurrence.

Sympistis heliophila (Paykull) (= *melaleuca* (Thunberg)). [Fig. 17]. This species and the next occur above tree line and are day-flying and extremely difficult to catch. I collected a larvae (Fig. 21) of this species on *Vaccinium uliginosum* L., but it eventually died. A photograph of the larva was identified. Adults were also taken on Mt. Washington. They fly mid-morning on sunny days and can be taken when they bask on rocks.

Sympistis funesta (Paykull). [Fig. 18]. Douglas Ferguson [pers. comm.] has also recorded this moth from Mt. Washington. Its adult habits are similar to the former species.

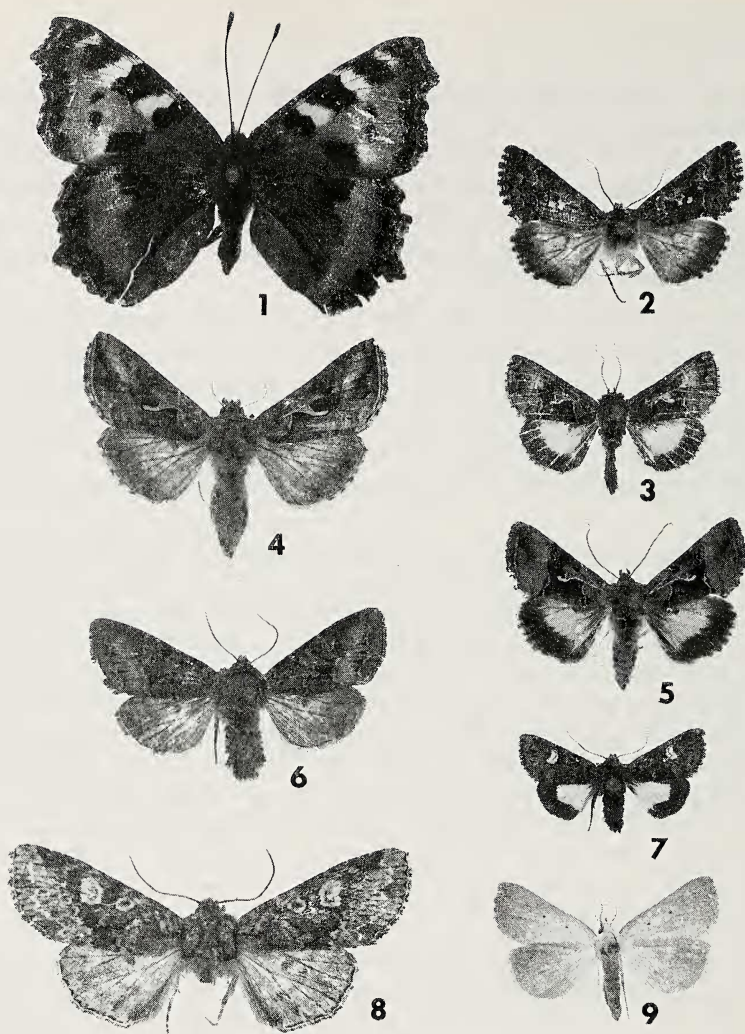
Macrochilo hypocritalis Ferguson. [Fig. 19]. Members of this genus are found in wet places. The Black Creek, Albany Co., N.Y. locale has provided many swamp species including four other *Macrochilo* species.

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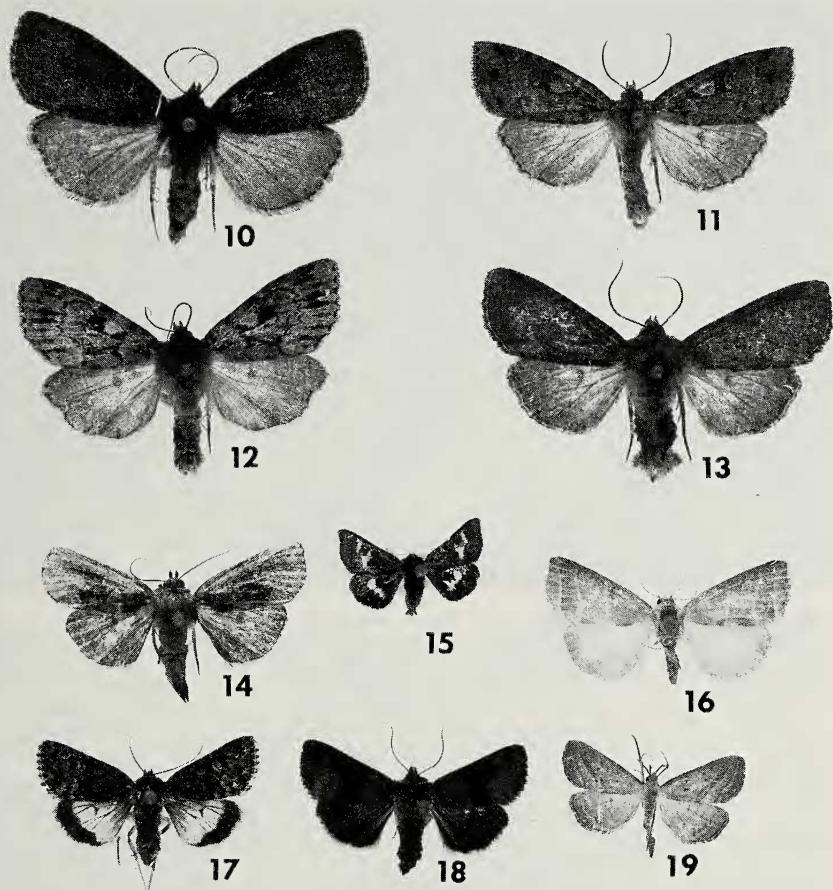
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- Fig. 1. *Aglais urticae*, Albany, Albany Co., N. Y., 19 October 1987, elev. 100 meters;
- Fig. 2. *Syngrapha abstrusa*, South Inlet, Raquette Lake, Hamilton County, N.Y., lat. 43.48.16 long. 74.36.30, 17 July 1977, elev. 555 meters;
- Fig. 3. *Syngrapha montana*, Lake Tear, Essex Co., N.Y., lat. 44.06.25 long. 73.56.05, 10 July 1980, elev 1310 meters;
- Fig. 4. *Autographa rubida*, 10 kilometers east of Indian Lake, Hamilton Co., N.Y., lat. 43.45.30 long. 74.10.14, 10 June 1977, 555 meters;
- Fig. 5. *Syngrapha microgamma*, 10 kilometers east of Indian Lake, Hamilton Co., N.Y., lat. 43.45.30 long. 74.10.14, 4 June 1977, 555 meters;
- Fig. 6. *Papestra quadrata*, Mt. Washington, Coos County, N.H., lat. 44.16.13 long. 71.18.02, 11 July 1985, elev. 1856 meters;
- Fig. 7. *Anarta cordigera*, Browns Tract Pond, Hamilton Co., N.Y., lat. 43.48.00 long. 74. 42. 17, 20 May 1980, elev. 555 meters;
- Fig. 8. *Pachypolia atricornis*, 10 kilometers east of Indian Lake, Hamilton Co., N.Y., lat. 43.45.30 long. 74.10.14, 30 September 1980, 555 meters;
- Fig. 9. *Gabara subnivosella*, Pine Bush, Albany Co., N.Y., lat. 42.42.19 long. 73.53.17, 9 July 1978, elev. 100 meters.



- Fig. 10. *Xestia atrata*, Whiteface Mt., Essex Co., N.Y., lat. 44.22.58 long. 73.54.15, 6 July 1986, elev. 1065 meters;
- Fig. 11. *Anomogyna rhaetica*, Whiteface Mt., Essex Co., N.Y., lat. 44.22.58 long. 73.54.15, 6 July 1986, elev. 1065 meters;
- Fig. 12. *Anomogyna fabulosa*, Whiteface Mt., Essex Co., N.Y., lat. 44.22.58 long. 73.54.15, 6 July 1986, elev. 1065 meters;
- Fig. 13. *Apamea commoda*, Whiteface Mt., Essex Co., N.Y., lat. 44.22.58 long. 73.54.15, 6 July 1986, elev. 1065 meters;
- Fig. 14. *Oligia obtusa*, Pine Bush, Albany Co., N.Y., lat. 42.42.19 long. 73.53.17, 24 July 1987, elev. 100 meters;
- Fig. 15. *Eutricopis nexilis*, 6 miles east of Indian Lake, Hamilton Co., N.Y., lat. 43.45.30 long. 74.10.14, 29 May 1980, 555 meters;
- Fig. 16. *Bagisara rectilinea*, Pine Bush, Albany Co., N.Y., lat. 42.42.19 long. 73.53.17, 17 July 1986, elev. 100 meters;
- Fig. 17. *Symistis heliophila*, Mt. Washington, Coos County, N.H., lat. 44.16.13 long. 71.18.02, 17 July 1984, elev. 1856 meters;
- Fig. 18. *Sympistis funesta*, Mt. Washington, Coos County, N.H., lat. 44.16.13 long. 71.18.02, 17 July 1984, elev. 1856 meters;
- Fig. 19. *Macrochilo hypocritalis*, Black Creek, Albany Co., N.Y., lat. 42.39.53 long. 74.58.01, 3 July 1984, elev. 100 meters.



Fig. 20. *Syngrapha microgamma*, South Inlet, Raquette Lake, Hamilton County, New York, lat. 43.48.16 long. 74.36.30, 17 May 1980, elev. 555 meters;

Fig. 21. *Sympistis heliophila*, Mt. Washington, Alpine Gardens, Coos County, New Hampshire, lat. 44.16.13 long. 71.18.02, 15 July 1981, elev. 1856 meters.



Fig. 22. *Eutricopis nexilis*, 10 kilometers east of Indian Lake, Hamilton County, New York, 12 June 1980, lat. 43.45.30 long. 74.10.14, elev. 555 meters.